

REMARKS

Reconsideration of the Office action mailed on December 16, 2004 is requested in view of the foregoing amendments and the following remarks.

Special Circumstances

The Examiner asked applicant to point out any material information from co-pending applications listed as parents to the instant application if the criteria for materiality applies and if the examination record provides reason for applicant to believe that the Examiner has not considered such information. Applicant has previously identified applications and believes that identification satisfies the duty of disclosure. Applicant is also attaching an updated list of applications and patents to this document. The Examiner is requested to inform applicant if further information is needed.

Drawings

The Examiner objected to the drawings as failing to show translational movement of a miter saw as set forth in claim 26. Applicant traverses this objection because the downward movement of a miter saw blade may be characterized as translational. Nevertheless, claim 26 has been cancelled without prejudice so this objection is moot.

Claim Rejections – 35 USC 112

Claims 7, 9 and 26 were rejected under 35 USC 112, first paragraph, as failing to comply with the enablement requirement. Specifically, the Examiner said it was "not clear how the radial arm saw in Figure 3 and claimed in claim 7 includes a miter saw as in claim 26." (Office action, 5.) First, applicant points out that claim 7 is not limited to the radial arm saw shown in Figure 3. Additionally, claim 7 may read on a miter saw because the downward movement of a miter saw blade may be characterized as

translational. Nevertheless, applicant has cancelled claim 26 without prejudice so this rejection is moot. Applicant believes that canceling claim 26 eliminates any enablement issues concerning claims 7, 9 or 26. The Examiner is requested to inform applicant if there remain any enablement issues concerning claims 7 or 9.

Double Patenting

The Examiner made several double patenting rejections, each of which is addressed below.

1. Patent 6,826,988.

The Examiner rejected claims 1-4, 7, 9, 17-19, 23 and 26 under the judicially created doctrine of obviousness-type double patenting in light of claims 7 and 8 from U.S. Patent No. 6,826,988. First, claim 26 has been cancelled without prejudice so the rejection of that claim is moot. The rejection of the remaining claims is traversed because a two-way test for obviousness should have been applied.

Section 804(II)(B)(1)(b) from the MPEP explains:

[W]here, through no fault of the applicant, the claims in a later filed application issue first, an obvious-type double patenting rejection is improper, in the absence of a two-way obviousness determination, because the applicant does not have complete control over the rate of progress of a patent application through the Office.

This rule is taken from the case of In re Braat, 937 F.2d 589, 19 USPQ2d 1289 (Fed. Cir. 1991). In that case, the Board of Patent Appeals and Interferences affirmed an obviousness-type double patenting rejection of an earlier-filed application in view of a commonly-assigned but later-filed patent. Both the application and the patent concerned optical record carriers such as CDs. The Board applied a one-way test for obviousness and determined that the claims at issue from the earlier-filed application were obvious in

light of claims from the later-filed patent. The Federal Circuit reversed and explained that a two-way test should have been applied because the two applications could not have been filed together as one, because it was not applicant's fault that the later-filed application issued first, and because the later-filed claims were not obvious in light of the earlier-filed claims. *Id.* at 594, 19 USPQ2d at 1293. The court explained that the rationale behind the application of the two-way test "is that an applicant (or applicants), who files applications for basic and improvement patents should not be penalized by the rate of progress of the applications through the PTO, a matter over which the applicant does not have complete control." *Id.* at 593, 19 USPQ2d at 1292 (citing 3 D. Chisum, *Patents*, §9.03[2][c] (1990)), and the following cases: In re Borah, 345 F.2d 1009, 148 USPQ 213 (CCPA 1966), In re Stanley, 214 F.2d 151, 102 USPQ 234 (CCPA 1954), In re Calvert, 97 F.2d 638, 38 USPQ 184 (CCPA 1938), Thomson-Houston Elec. Co. v. Elmira & Horseheads Ry. Co., 71 F. 396 (2d Cir.), *cert. denied* 163 U.S. 685, 16 S.Ct. 1201, 41 L.Ed.2d 315 (1896), Thomson-Houston Elec. Co. v. Ohio Brass Co., 80 F. 712 (6th Cir. 1897)).

The case of In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998), further explains when a two-way test applies. In Berg, the Federal Circuit affirmed a one-way double patenting rejection of genus claims in light of nearly identical species claims. The claims concerned a method of preparing abrasive particles for use as an abrasive grit. The genus and species claims were the subject of two separate applications filed the same day. The species claims issued first and the Patent Office applied a one-way test to reject the genus claims in light of the species claims. The court affirmed the double patenting rejection and the application of the one-way test

because Berg could have filed all the claims in a single application but instead chose to file two separate applications on the same day. Id. at 1433, 46 USPQ2d at 1230.

Even though Berg affirmed the application of the one-way test, the court recognized that the two-way test applies when a later-filed improvement patent issues before an earlier-filed basic invention. Specifically, the court distinguished Braat by saying: "Braat ... emphasized the more typical scenario in which, despite common inventive entities, the two-way test applied: 'when a later-filed improvement patent issues before an earlier filed basic invention.'" Id. at 1434, 46 USPQ2d at 1230 (quoting In re Braat, 937 F.2d at 593, 19 USPQ2d at 1292, emphasis added in Berg). The court in Berg also said the "essential concern" behind the two-way test "was to prevent rejections for obviousness-type double patenting when the applicants filed first for a basic invention and later for an improvement, but, through no fault of the applicants, the PTO decided the applications in reverse order of filing, rejecting the basic application although it would have been allowed if the applications had been decided in the order of their filing." Id. at 1432, 46 USPQ2d at 1229. These statements confirm that the two-way test applies when a later-filed improvement patent issues before an earlier-filed application through no fault of applicant.

The situation in the present application is the same as in Braat and as described in Berg, and therefore, the two-way test for obviousness should apply. The present application was filed before the cited patent and the cited patent could not have been filed with the present application because it includes additional disclosure of later-developed material. It is not applicant's fault that the cited patent issued first. Also, the cited claims from the later-filed patent are not obvious in light of the earlier-filed claims.

The Examiner, however, applied a one-way test because he said administrative delay is required for a two-way test and there has been no administrative delay. Specifically, the Examiner said: "The office did not prevent the earlier application from being prosecuted. It should be noted that normal prosecution of an application does not constitute delaying. Therefore, only a one-way test is required." (Office action, 13.)

Saying administrative delay is required for the two-way test is another way of saying the two-way test applies if the administrative process, and not some action taken by the applicant, delayed issuance of the first-filed application until after issuance of the later-filed application. In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233. If the delay was no fault of applicants, or in other words, if applicant did not take some action to delay the issuance of the first application, then the Patent Office (i.e., the administrative process) is responsible for the delay. However, if applicant took some action to delay the issuance of the first application until after the second patent issues, then a one-way test may be appropriate. Id.

The cases of Braat and Berg illustrate this point. In Braat the Federal Circuit applied the two-way test because it was "not [applicant's] fault that the combination claims in the [subsequent] patent issued first." Braat, 937 F.2d at 594, 19 USPQ2d at 1293. Applicant did not act to delay the issuance of the first application. In Berg the Federal Circuit did not decide whether there was delay, but gave the following examples of how an applicant could delay the issuance of a first-filed application: "filing the genus claims long after the species claims even though the two were invented at nearly the same time or the genus claims were invented first, or by filing numerous continuations in the genus application while failing to respond substantively to PTO Office actions." In

re Berg, 140 F.3d at 1434 n.6, 46 USPQ2d at 1231 n.6 (citing In re Emert, 124 F.3d 1458, 1461, 44 USPQ2d 1149, 1152 (Fed. Cir. 1997)).

The present application is similar to Braat because applicant did not act to delay the issuance of the first application. The present application was filed first, before the application that matured into the cited patent. The application that matured into the cited patent was filed approximately five months after the present application as a continuation-in-part to the present application (and to other applications). Also, the present application is not the result of multiple continuation applications, and applicant has responded substantively and promptly to each Office action. Thus, none of the acts identified in Berg by which an applicant may delay prosecution are found in the present application. On the other hand, the Patent Office did not issue a first action in the present application until two years after filing. These facts show that it is not applicant's fault that the claims in the later-filed application issued first, and therefore, a two-way test should be applied, as explained in Braat and Berg.

It may be that claims in a later-filed application issue before claims in an earlier-filed application simply because more time is required to determine the patentability of the earlier-filed claims. Any such delay, however, is not applicant's fault; rather, it is simply the result of the administrative process. The Federal Circuit recognized in Braat, 937 F.2d at 593, 19 USPQ2d at 1292, that applicant "should not be penalized by the rate of progress of the applications through the PTO," and therefore, any delay resulting from the administrative process is properly credited to the Patent Office. The Examiner, however, said: "It should be noted that normal prosecution of an application does not constitute delaying." (Office action, 13.) Applicant is not sure what the Examiner means

by this statement. Applicant agrees that normal prosecution does not constitute delay caused by applicant. However, if a later-filed application issues before an earlier-filed application through normal prosecution, there has been delay and that delay should be credited to the Patent Office because it occurred through no fault of the applicant.

For all these reasons, a two-way obviousness test should be applied. Under that test, the present double patenting rejection is improper and should be withdrawn because claims 7 and 8 in the cited patent include limitations that distinguish and are not obvious over claims 1-4, 7, 9, 17-19, and 23 in the present application.

Applicant also points out that the policy behind an obviousness-type double patenting rejection is "to prevent an unjustified extension of the term of the right to exclude granted by a patent by allowing a second patent claiming an obvious variant of the same invention to issue to the same owner later." In re Berg, 140 F.3d at 1431-1432, 46 USPQ2d at 1229. This is not a concern in the present application because patent term is now measured from the filing date rather than the issue date. 35 USC 154(a)(2).

Applicant further points out that this double patenting rejection of earlier-filed claims is inconsistent with the practice of filing continuation-in-part applications. The rejection, if correct, would mean that a subsequent invention comprising A, B and C could be the basis for a double patenting rejection of a previous invention comprising only A and B even though the subsequent invention could not have been included in the prior application because it had not yet been invented and even though the claims to the subsequent invention could not be added to the earlier application because those claims would constitute new matter. The result would be to unfairly limit the ability of an

inventor to file applications on subsequent inventions, which is contrary to the ruling of Braat discussed above.

This double patenting rejection also results in unequal treatment under the patent laws. Specifically, this double patenting rejection prevents applicant from receiving separate patents to genus and species inventions simply because one application includes claims that dominate claims in the other application, even though others could obtain separate patents. For example, if a third party invented the machine described in cited claims 7 and 8 instead of applicant, then both applicant and the third party could patent their respective inventions without receiving a double patenting rejection even though the claims to the genus would dominate the claims to the species. If unrelated parties can file separate applications to genus and species claims without invoking a double patenting rejection, then a single party should be able to do likewise.

Applicant also asserts that even under the one-way test, the double patenting rejection should be withdrawn because claims 1-4, 7, 9, 17-19, and 23 do not define merely an obvious variation of the invention defined by claims 7 and 8 in the cited patent. Claims 1-4 and 23 require "a cutting zone" and "a reaction system adapted to stop motion of the cutting tool into the cutting zone." Claims 7 and 9 require "a cutter adapted to move translationally" and "a reaction system adapted to interrupt the translational movement of the cutter." Claims 17-19 require "a work zone" and "a reaction system adapted to limit movement of the blade into the work zone." Claims 7 and 8 in the cited patent do not include these limitations. Additionally, claims 7 and 8 in the cited patent include limitations not found in the cited claims of the present application and those limitations result in claims that define an invention patentably

distinct from the claims in the present application. See General Foods Corp. v. Studiengesellschaft Kohle mbH, 23 USPQ2d 1839, 1843 (Fed. Cir. 1992) ("Anything less than a process with all 9 steps is not what is claimed, and is, therefore, not patented."); In re Stanley and Lowe, 102 USPQ 234, 240 (CCPA 1954) (appealed claims were distinguishable from improvement claims because the improvement claims included additional limitations).

2. Application No. 10/051,782 in view of Yoneda.

The Examiner provisionally rejected claims 1, 2, 4, 17-19 and 23 under the judicially created doctrine of obviousness-type double patenting in light of claims 1, 5, 20 and 27 from co-pending application number 10/051,782 in view of U.S. Patent No. 4,117,752 to Yoneda. Applicant notes that application 10/051,782 has now issued as U.S. Patent No. 6,877,410. This rejection is traversed for the same reasons explained above and because there is no motivation or suggestion to combine Yoneda with the cited claims.

Applicant further traverses this rejection because the claims at issue differ in scope and coverage and are patentably distinct. Claims 1, 2, 4 and 23 all require a reaction system adapted to stop motion of the cutting tool into a cutting zone upon detection of contact. Claims 17 and 19 require a reaction system adapted to limit movement of the blade into the work zone. None of the cited co-pending claims disclose these limitations. The cited co-pending claims disclose a system to urge a blade away from a cutting zone and urging a blade away does not require stopping or limiting movement. Thus, the cited co-pending claims do not disclose all the limitations of the cited claims in the present application so the present claims are not obvious. MPEP

2143.03 ("To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.").

The Examiner, however, says: "A blade, which is urged away from the cutting area is clearly prevented from moving toward the cutting area and therefore, the motion toward the cutting area, by the blade is stopped." (Office action, 14.) That interpretation impermissibly replaces the word "urge" with the word "stop." Clearly, a force can urge a moving object away without actually stopping the movement of the object. For example, a river can urge a boat downstream, but the boat may still move upstream. Another analogy illustrating the difference between "urging" and "stopping" is that a person may urge another to stop taking drugs without success. *cf. In re Vogel and Vogel*, 164 USPQ 619 (CCPA 1970) ("pork" does not disclose "beef" in a method for prolonging the storage life of packaged meat products).

3. Application No. 09/676,190 in view of Yoneda.

The Examiner provisionally rejected claims 1, 2, 4, 7, 9, 17-23 and 26 under the judicially created doctrine of obviousness-type double patenting in light of claims 25-30 and 35-40 from co-pending application number 09/676,190 in view of Yoneda. First, claim 26 has been cancelled without prejudice so the rejection of that claim is moot. The rejection of the remaining claims is traversed because they are patentably distinct from the cited claims and because there is no suggestion or motivation to combine Yoneda with the cited co-pending claims.

Claims 1, 2, 4, 7, 9 and 20-23 all require a detection system adapted to detect contact between a person and a cutting tool and a reaction system adapted to stop motion of the cutting tool into a cutting zone upon detection of contact. Claims 17 and

19 require a detection system adapted to detect contact and a reaction system adapted to limit movement of the blade into the work zone. None of the cited co-pending claims disclose a reaction system to stop or limit movement of a cutting tool or blade into a work zone. Instead, the cited co-pending claims disclose a system to urge a blade away from a cutting zone or to create an impulse against movement of a blade into a cutting zone. Urging a blade away and creating an impulse against movement are different in that they do not require stopping or limiting, as explained. Claim 3 in the current application discloses first and second brake mechanisms, but those limitations are not disclosed in the cited co-pending claims. Claim 4 in the current application discloses stopping movement of an operative structure, claim 7 describes interrupting translational movement, and claims 18-22 include limitations to pawls, radial arm saws, wedges and spools, none of which are disclosed by the cited co-pending claims. Thus, the cited claims in the present application cannot be obvious in light of the cited references. MPEP 2143.03.

This rejection also is traversed because it results in unequal treatment under the patent laws, it confuses the issues of claim dominance and double patenting, and there would be no unjustified or improper extension of patent term if the double patenting rejection were withdrawn.

4. Application No. 10/052,806 in view of Yoneda.

The Examiner provisionally rejected claims 1, 2, 4, 7, 9, 17-23 and 26 under the judicially created doctrine of obviousness-type double patenting in light of claims 6, 12-14, 19 and 20 from co-pending application number 10/052,806 in view of Yoneda. This rejection is traversed for the same reasons explained above in section 1 concerning

patent 6,826,988 and because there is no motivation or suggestion to combine Yoneda. Applicant also notes that application 10/052,806 has now issued as U.S. Patent No. 6,880,440, and that claim 26 from the present application has been cancelled without prejudice so the rejection of that claim is moot.

5. Application No. 10/643,296.

The Examiner provisionally rejected claims 1, 2, 4, 17-19 and 23 under the judicially created doctrine of obviousness-type double patenting in light of claims 1, 8 and 9 from co-pending application number 10/643,296. This rejection is traversed for the same reasons explained above in section 1 concerning patent 6,826,988.

6. Application No. 09/955,418.

The Examiner provisionally rejected claims 1, 2, 4, 7, 9, and 17 under the judicially created doctrine of obviousness-type double patenting in light of claims 1, 8, 9-12, and 14-19 from co-pending application number 09/955,418. First, co-pending claims 1, 8, 9 and 14-19 have been cancelled without prejudice so the rejection based on those claims is moot. The rejection based on co-pending claim 12 is traversed for the same reasons explained above in section 1 concerning patent 6,826,988.

7. Application No. 10/052,273 in view of Yoneda.

The Examiner provisionally rejected claims 1, 2, 4, 7, 9, 17-23 and 26 under the judicially created doctrine of obviousness-type double patenting in light of claims 5-24 from co-pending application number 10/052,273 in view of Yoneda. First, applicant notes that application 10/052,273 has now issued as U.S. Patent No. 6,813,983. Applicant also notes that claim 26 from the present application has been cancelled without prejudice so the rejection of that claim is moot. The rejection of the remaining

claims is traversed for the same reasons explained above in section 1 concerning patent 6.826,988 and because there is no motivation or suggestion to combine Yoneda.

This rejection is further traversed because claims 1, 2, 4, 7, 9 and 17-23 require a reaction system adapted to stop motion of the cutting tool into the cutting zone upon detection of contact while the cited co-pending claims do not. MPEP 2143.03. Instead, the co-pending claims require a retraction assembly, drive mechanism, or reaction means to *urge* some structure in a given direction, and, as explained above, the Examiner incorrectly equates the word "urge" with the word "stop."

Claim Rejections – 35 USC 103

Claims 1-4, 7, 9, 17 and 20-22 remain rejected under 35 USC 103(a) as obvious in light of Gaines (U.S. Patent No. 5,052,255) in view of Lokey (U.S. Patent No. 3,785,230) or Friemann et al. (U.S. Patent No. 3,858,095). Applicant traversed and responded to this rejection in prior amendments. One reason applicant traversed the rejection is that a detection system as disclosed in Lokey or Friemann would not work with a brake as disclosed in Gaines. The Examiner responded by saying:

[I]t should be noted that there is no requirement for the teaching of Gains, Lokey and Friemann to be bodily incorporated. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. (Office action, 14.)

Applicant is not saying that the specific detection systems of Lokey or Friemann must be bodily incorporated into the structure of Gains. Rather, applicant is saying that detection systems like those disclosed in Lokey and Friemann simply do not work with

brakes triggered by acceleration, like those disclosed in Gains, and as a result, the combination of Gains, Lokey and Friemann is not obvious.

Applicant agrees that if Gains, Lokey and Friemann suggest to one of ordinary skill in the art a machine as described in applicant's claims, then the claims would be obvious. However, it is equally true that if the references or knowledge generally available to one of ordinary skill in the art do not suggest the combination, then the claims are not obvious.¹ Thus, the question becomes whether the references or general knowledge suggest the combination. There are many factors that may be considered to answer that question. One factor is whether the proposed combination would change the principle of operation of the device being modified. If it does, then there is no suggestion to make the combination. MPEP 2143.01. Another factor is whether there is a reasonable expectation that the proposed combination would work. If not, then there is no suggestion to make the combination. MPEP 2143.02. These are both well established factors that, in the case at hand, show there is no suggestion to combine Gains with Lokey and/or Friemann.

The saw disclosed in Gains employs brakes actuated by acceleration. (Gaines, column 4, column 5, lines 19-25, column 6, lines 8-10 and 50-56.) The acceleration is produced when the spinning blade unexpectedly climbs a workpiece toward a user. The principle of operation is for the unexpected acceleration to trigger a brake that will restrict the movement of the blade toward the user to prevent injury. The proposed combination would change that principle of operation because unexpected acceleration

¹ The suggestion to combine must be found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. It cannot be found in applicant's disclosure. MPEP 2143.01.

would no longer trigger the brake. Instead, an electric signal indicating the blade had approached or contacted the user would have to actuate the brake. How the electric signal would actuate the brake is unclear because the brakes disclosed in Gains would not respond to an electric signal. In any event, the resulting combination would employ a different principle of operation, namely, triggering a brake on detected proximity or contact instead of unexpected acceleration, and therefore, there is no suggestion to make the combination. MPEP 2143.01.

This situation is similar to the case of In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). The claims in that case were directed to an oil seal comprising a bore engaging portion with a resilient sealing member and the claims were rejected as obvious in light of a combination of references, including a primary reference with a more rigid seal. The court reversed the rejection, explaining that the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate." Id. at 813, 123 USPQ at 352. The Ratti case is analogous to the situation at hand because the proposed combination of Gains, Lokey and Friemann would require a substantial reconstruction and redesign, namely the saw of Gains would somehow have to be modified to include a brake triggered by an electric signal. But, as stated, that modification would change the basic principle under which the saw was initially designed to operate. As a result, there is no suggestion to make the combination, just as there was no suggestion in Ratti.

There is also no reasonable expectation that the saw disclosed in Gains could be successfully combined with the detection systems of Lokey or Friemann. As stated, brakes like those disclosed in Gains are triggered by unexpected acceleration, not an electric signal, but proximity and contact detection systems like those disclosed in Lokey and Friemann produce electric signals, not unexpected acceleration. There simply is no teaching in any cited reference how to successfully combine detection systems that produce electric signals with brakes triggered by acceleration, and as a result, there is no reasonable expectation that the combination would succeed.

Moreover, brakes triggered by acceleration would not work with a contact detection system, as required by applicant's claims, because the brakes would have to accelerate to engage and that acceleration would move the blade further into the user and create a more serious injury. Clearly, there is no reasonable expectation of success if the proposed combination would create a more serious injury.

Another reason why the combination of Gains, Lokey and Friemann does not suggest a machine with a contact detection system, as required by applicant's claims, is because Lokey discloses a proximity detection system. By disclosing a proximity detection system, Lokey teaches away from using a contact detection system. A person of ordinary skill would more likely think to incorporate a proximity detection system in the saw disclosed in Gains rather than a contact detection system because a proximity detection system would completely avoid injuries. In light of Lokey's teaching, why would a person of ordinary skill think to use a contact detection system, or where is the motivation to try that? Applicant asserts that there is no such motivation or suggestion, and therefore, applicant's claims are not obvious. MPEP 2143.

For all these reasons, claims 1-4, 7, 9, 17 and 20-22 are not obvious in light of Gaines, Lokey and Friemann and this rejection should be withdrawn.

Claims 1, 17, 18 and 23 were rejected under 35 USC 103(a) as obvious in light of Suzuki (U.S. Patent No. 5,791,224) or Brundage (U.S. Patent No. 4,934,233) combined with Gaines or Terauchi (U.S. Patent No. 4,512,224) and Lokey or Friemann. Applicant traverses this rejection to the extent it combines Gaines with Lokey or Friemann for the reasons given above. Applicant traverses this rejection to the extent it relies on Lokey because Lokey discloses a proximity detection system while applicant's claims require contact detection, and a proximity detection system teaches away from a contact detection system, as stated previously.

Applicant also traverses this rejection to the extent it relies on Terauchi because Terauchi is non-analogous art and therefore outside the proper scope and content of the art. MPEP 2141.01(a). Terauchi is non-analogous art because it is outside the field of applicant's endeavor. The field of applicant's endeavor was woodworking machinery while the field of Terauchi's disclosure was textile cutting, specifically, slitters used to cut cloth rolled onto a tube. Terauchi is also non-analogous art because it is not reasonably pertinent to the particular problem addressed by applicant's claims. Applicant's claims address the problem of detecting contact between a person and a cutting tool or blade and then stopping or limiting the movement of the cutting tool into a cutting zone or work zone when contact is detected. Terauchi addresses the issue of a blade that fails to stop when cutting through a roll of cloth. Nothing in Terauchi addresses or even mentions the problem of a person accidentally contacting the blade.

Thus, Terauchi should not be considered in an obviousness analysis of the currently pending claims.

Nevertheless, even if Terauchi is considered, there still is no suggestion or motivation to combine Suzuki or Brundage with Terauchi. As stated previously, in order for the claims to be obvious, there must be some suggestion in the cited references or in the knowledge generally available to one of ordinary skill in the art to make the combination. If there is no such suggestion, then the claims are not obvious. MPEP 2143.01. In the case at hand, the question of whether there is a suggestion to make the combination can be answered by asking whether there is a reasonable expectation that the proposed combination would work. If not, then there is no suggestion to make the combination and the claims are not obvious. MPEP 2143.02.

Terauchi discloses a slitter machine to cut material such as cotton cloth that is rolled onto a tube. The roll is held horizontal and a blade moves forward to cut the roll. The blade will advance until a limit switch contacts a stop, at which point the blade will move back. If the limit switch fails, then the blade will continue to move forward without stopping until it contacts the rod supporting the roll. If that contact occurs, a current will pass from the blade through the rod to signal the blade to move back and/or stop. Terauchi uses a motor M1 to turn a screw 11 to move the blade forward and back, and it uses an electromagnetic brake to stop the rotation of the blade.

There is no reasonable expectation that a system as disclosed in Terauchi could work with a miter saw as disclosed in Suzuki and Brundage. The blade in Terauchi is mounted on a table which in turn is supported by a screw 11. Screw 11 turns in one direction to move the blade forward to cut the cloth roll, and it turns in the other direction

to move the blade back. Turning the screw is the only way to move the blade. That type of system, however, cannot work with a miter saw because the blade in a miter saw must remain free for a user to move up and down to make a cut. There cannot be a screw as disclosed in Terauchi, or any other mechanical system, to restrict or control the up and down motion of the blade. Thus, there is no reasonable expectation that the retraction mechanism disclosed in Terauchi could work with a miter saw as disclosed in Suzuki or Brundage.

Another test to determine whether there is a suggestion to modify a device is to ask whether the modification would render the device unsatisfactory for its intended purpose. If it does, then there is no suggestion. MPEP 2143.01; In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). In the case at hand, modifying the miter saw of Suzuki or Brundage to include a screw or other mechanical system to stop or limit the movement of the blade into a work or cutting zone would render the saw unsatisfactory because a user could no longer move the blade up and down freely, as explained.

Both these tests show that there is no suggestion to make the combination proposed by the Examiner. In fact, it is only by looking at applicant's disclosure that one learns how to construct a saw with a reaction system as set forth in claims 1 and 17. But in an obviousness analysis, one must review the prior art without the benefit of applicant's disclosure. One cannot use the teaching of applicant's disclosure to suggest the modification to the prior art. The law is "clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617

(Fed. Cir. 1999) (citations omitted). Additionally, a suggestion, teaching or motivation to combine or modify references "must be clear and particular." Id. (citation omitted). There is no clear and particular suggestion, teaching or motivation to combine Terauchi with Suzuki or Brundage.

Applicant also traverses this rejection to the extent it relies on the combination of Suzuki or Brundage with Friemann because Suzuki and Brundage disclose miter saws with circular blades while the device disclosed in Friemann is a band cutter. Those machines are constructed very differently and the differences would prevent the detection system disclosed in Friemann from being successfully implemented in miter saws. For example, the band cutter in Friemann moves in a path around three rollers and one pulley and a roller rolls along the side of the band cutter as the band cutter moves to couple the band cutter to the detection circuit. The miter saws disclosed in Suzuki and Brundage, however, include circular blades that spin. That spinning would prevent the roller disclosed in Friemann from always remaining in contact with the circular blade. The connection between Friemann's band cutter and circuit would have to be modified to work on a circular saw, but it is not clear how. The band cutter in Friemann must also be electrically isolated, and Friemann accomplishes that by placing a rubber covering on the periphery of the pulleys around which the band cutter moves. But the circular blade in Suzuki and Brundage is mounted on an arbor, it does not move around pulleys, so it would have to be isolated in some different way, but there is no teaching how. These differences between a miter saw and a band cutter show that there is no reasonable expectation that the detection system of Friemann could be

successfully implemented in the saws shown in Suzuki and Brundage, and therefore, there is no motivation or suggestion to combine those references. MPEP 2143.02.

For all these reasons, in addition to the reasons expressed in prior amendments, the currently pending claims are not obvious.

Withdrawn Claims

Applicant requests that the withdrawn claims be reinstated because they depend from claims which should now be allowed.

Claim 19

Applicant notes that the only rejections of claim 19 are the double patenting rejections. Claim 19 has not been rejected based on prior art.

Conclusion

Applicant submits that all of the issues raised in the Office action mailed December 16, 2004 have been addressed and overcome, and therefore, the application should be allowed.

Respectfully submitted,

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